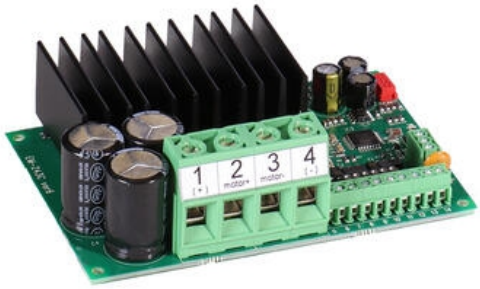
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ELECTROMEN - EM-243C

DC motor 2Q drive 12-48Vdc, 50A

EM-243C*
DC motor 2Q drive 12-42Vdc, 50A



- 12-48Vdc, 50A continuous, 100A peak
- Speed, direction, current limiting, soft start/stop and auto-reverse control
- Limit switch inputs for end of travel
- Compact, DIN rail mountable

PRODUCT DESCRIPTION

EM-243C is a full bridge DC-motor starter. It is designed to work with DC-motor in applications where some special functions are needed. Starter has adjustable acceleration and deceleration ramps, which make possible the smooth starts and stops. Adjustable current limit protects motor against overcurrent and it can also be used as an end-stop. This device has also two settable speeds, which are usefull in positioning applications. Control inputs FW and BW start the forward and backward run. STOP is for the motor shut-down but there are also available individual limit inputs for FW and BW directions. SPEED-2 input activates preset speed-2, but it can also be used as input for analog speed control signal 0-5V. FAULT terminal has at the same time input and output function, the pin is normally high, but is pulled down in overheat and conditionally also in current trip situation. If FAULT-line is pulled down externally it will cause a stop and prevent the new start. For example, it is possible to link fault pins of several units together and achieve a syncronous stop. There are 2 selectable control modes, contionuous and impulse. In continuous mode the motor runs as long as the control is active.
In impulse mode a short comand starts the motor, and only a new impulse will change the status. The card has selectable input logics.
Inputs are divided in two groups, control and limit -inputs. Groups can be individually set for NPN or PNP logic. The parameters are set with EM-236 interface unit. Operation of the controller and some of its functional values can also be monitored with EM-236 interface unit. In C-version program is possible to select 16kHz pwm frequency (= silent) but notice that current output capability is lower with 16kHz.

FEATURES (notice Prog. and PCB versions)
- small size
- high current output
- current limit
- zero current limit
- speed setting
- flexible control inputs
- impulse / continuous mode
- rail base mountable
- digital parameter setting
- C ver. card compatible with A version card
- C firmware can be loaded A-ver. card
- C ver. new features
+ freewheel options parameter (param 19)
+ 2 or 16kHz pwm freq.select (param. 20)
+ current limit analog input (param 6&7)
+ speed+dir operating mode (param. 5)
+ Fan and Brake available in board 243C v.2
+ Extend operating voltage in board 243C v.2

* Motor current max. with 2kHz pwm
100% pwm 50A , 20-99pwm% 35A and peak 100A (5s)
Motor current max. with 16kHz pwm
100% pwm 40A , 20-99pwm% 20A and peak 60A (5s)

TECHNICAL DATA

2053_Current limit (A)	1-100
2421_Peak current (A)	(5s) 100
5646_Dimensions length x width x height (mm)	107x72x40mm
Analogue input	0-5V or 0-10V
Control type	Speed, Direction, Torque, Soft start / stop
Current setting range	1-100 A
Logic input high	>4V = ON
Logic input low	<1V = OFF
Max continuous current	*50 A
Mounting	DIN rail
Operating temperature	-40°C...+60°C
PWM frequency	2kHz/16kHz
Suitable engine	DC
Supplier	Electromen
Supply voltage	12 V DC, 24 V DC, 36 V DC, 48 V DC
Weight	190 g

